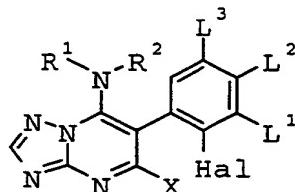


Claims:

1. Substituted 6-(2-halogenphenyl)-triazolopyrimidines of formula I

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I

in which

15 R¹ denote C₁-C₁₀-alkyl, C₂-C₁₀-alkenyl, C₂-C₁₀-alkynyl, or
C₄-C₁₀-alkadienyl, C₁-C₁₀-haloalkyl, C₂-C₁₀-haloalkenyl,
C₃-C₁₀-cycloalkyl, phenyl, naphthyl, or

20 a 5- or 6-membered saturated, unsaturated, or aromatic
heterocycle, containing one to four nitrogen atoms or
one to three nitrogen atoms and one sulfur or oxygen
atom,

25 wherein R¹ and R² radicals may be unsubstituted or
partly or fully halogenated or may carry one to three
groups R^a,

30 R^a is cyano, nitro, hydroxyl, C₁-C₆-alkyl, C₃-C₆-cyclo-
alkyl, C₁-C₆-alkoxy, C₁-C₆-alkylthio, C₁-C₆-alkylamino,
di-C₁-C₆-alkylamino, C₂-C₆-alkenyl,
C₂-C₆-alkenyloxy, C₂-C₆-alkynyl, C₃-C₆-alkynyloxy,
or C₁-C₄-alkylenedioxy; or

35 R² denote hydrogen, or a group mentioned for R¹; or

40 R¹ and R² together with the interjacent nitrogen atom
represent a saturated or partially unsaturated 5- or
6-membered heterocycle, containing one to four nitrogen
atoms or one to three nitrogen atoms and one sulfur or
oxygen atom, which ring may be substituted by one to
three R^a radicals;

45 Hal is halogen;

L¹, L³ independently denote hydrogen, halogen, or C₁-C₄-alkyl;

L² is hydrogen, halogen, C₁-C₄-haloalkyl, or NH₂, NHR^b, or N(R^b)₂,

R^b is C₁-C₈-alkyl, C₃-C₁₀-alkenyl, C₃-C₁₀-alkynyl,
 5 C₁-C₆-haloalkyl, C₃-C₆-haloalkenyl,
 C₃-C₆-haloalkynyl, C₁-C₈-alkoxy-C₁-C₈-alkyl,
 C₁-C₈-alkylthio-C₁-C₈-alkyl, C₃-C₁₀-cycloalkyl, or
 C(=O)-A, in which
 A is hydrogen, hydroxy, C₁-C₈-alkyl, C₁-C₈-alkoxy,
 10 C₁-C₆-halogenalkoxy, C₁-C₈-alkylamino or
 di-(C₁-C₈-alkyl)amino;

wherein at least one from L¹, L², and L³ is not hydrogen;

15 X is halogen, cyano, C₁-C₆-alkyl, C₁-C₆-alkoxy,
 C₁-C₆-haloalkoxy or C₃-C₈-alkenylloxy.

2. Compounds of formula I according to claim 1, in which

20 R¹ is straight chained or branched C₂-C₆-alkenyl, C₁-C₆-alkyl, or C₁-C₁₀-haloalkyl, and

R² is hydrogen or C₁-C₆-alkyl, or

25 R¹ and R² together with the interjacent nitrogen atom represent a heterocyclic ring with 5 or 6 carbon atoms being optionally substituted with one or two C₁-C₄-alkyl groups.

30 3. Compounds according to any one of claims 1 or 2 in which R¹ and R² together with the interjacent nitrogen atom represent a 5- or 6-membered heterocyclic ring being optionally substituted with one or two methyl groups.

35 4. Compounds a formula I to any one of claims 1 to 3 in which X is halogen.

5. Compounds a formula I according to claims 1 to 4 in which thew 6-(2-halogenphenyl)group represents one of the following moieties:

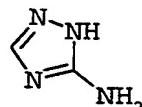
45 2,3,5-trifluorophenyl, 2,4-difluorophenyl, 2-F,4-CF₃-phenyl, 2-F,5-CH₃-phenyl, 2-Cl,4-F-phenyl, 2-F,4-Cl-phenyl, 2-F,4-Br-phenyl, 2-Cl,4-Br-phenyl, 2,3-difluorophenyl, 2,4-difluoro-phenyl, 2,4,5-trifluorophenyl, 2,3,4-trifluorophenyl,

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2-F, 4-NHC(O)CH₃-phenyl, 2-Br, 3,5-difluorophenyl,
2-F, 4-NO₂-phenyl, and 2-Cl, 4-NO₂-phenyl.

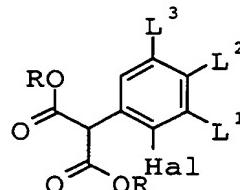
6. A process for the preparation of compounds of formula I as
5 defined in claims 4 and 5 which comprises reacting
5-amino-1,2,4-triazole

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with 2-phenyl-substituted malonic acid ester of formula II,

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II

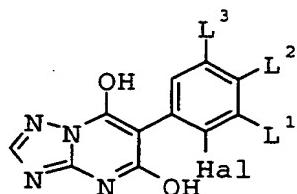
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wherein Hal, L¹, L², and L³ are as defined in formula I, and R denotes C₁-C₆-alkyl, under alkaline conditions, to yield com-

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pounds of formula III,

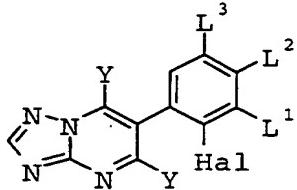
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III

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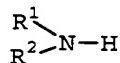
which are subsequently treated with a halogenating agent to give 5,7-dihalogen-6-phenyl-triazolopyrimidines of formula IV



IV

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in which Y is halogen, with an amine of formula V



V

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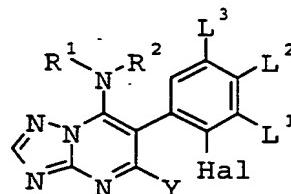
in which R¹ and R² are as defined in formula I to produce com-
pounds of formula I.

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7. A process for the preparation of compounds of formula I ac-
cording to claim 1 wherein X is cyano, C₁-C₁₀-alkoxy, or
C₁-C₁₀-haloalkyl, which comprises reacting 5-halogen-triazo-
lopyrimidine of formula I',

45

5



wherein Y is halogen, with compounds of formula VI,

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M-X'

VI

15

which are, dependent from the value of X' to be introduced, an anorganic cyano salt, an alkoxylate, haloalkoxylate or an alkenyloxylate, resp., wherein M is ammonium-, tetraalkylammonium-, alkali metal- or earth metal cation, to produce compounds of formula I.

8. Intermediates of formulae II, III, and IV as defined in claim 6.

20 9. A composition suitable for controlling phytopathogenic fungi, comprising a solid or liquid carrier and a compound of the formula I as claimed in claim 1.

10. A method for controlling phytopathogenic fungi, which comprises treating the fungi or the materials, plants, the soil or the seed to be protected against fungal attack with an effective amount of a compound of the formula I as claimed in claim 1.

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